

2590
0425 #4

OIPE

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/028,158

TIME: 12:04:14

Input Set : N:\Crf3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw

1 <110> APPLICANT: Caniggia, Isabella
 2 Post, Martin
 3 Lye, Stephen
 4 <120> TITLE OF INVENTION: METHODS TO DIAGNOSE A REQUIRED REGULATION OF
 5 TROPHOBLAST
 6 <130> FILE REFERENCE: 11757.38USWO
 7 <140> CURRENT APPLICATION NUMBER: 10/028,158
 8 <141> CURRENT FILING DATE: 2001-12-20
 10 <150> PRIOR APPLICATION NUMBER: US/09/380,662
 11 <151> PRIOR FILING DATE: 1999-12-21
 14 <150> PRIOR APPLICATION NUMBER: PCT/CA98/00180
 15 <151> PRIOR FILING DATE: 1998-03-05
 16 <150> PRIOR APPLICATION NUMBER: US 60/039,919
 17 <151> PRIOR FILING DATE: 1997-03-07
 18 <160> NUMBER OF SEQ ID NOS: 24
 19 <170> SOFTWARE: PatentIn version 3.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 16
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Homo sapiens
 25 <400> SEQUENCE: 1
 26 cctttgcaag tgcac 16
 28 <210> SEQ ID NO: 2
 29 <211> LENGTH: 16
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Homo sapiens
 32 <400> SEQUENCE: 2
 33 gatgcacttg caaagg 16
 35 <210> SEQ ID NO: 3
 36 <211> LENGTH: 16
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Homo sapiens
 39 <400> SEQUENCE: 3
 40 gcgtgccgcg gtccat 16
 42 <210> SEQ ID NO: 4
 43 <211> LENGTH: 16
 44 <212> TYPE: DNA
 45 <213> ORGANISM: Homo sapiens
 46 <400> SEQUENCE: 4
 47 atggaccgcg gcacgc 16
 49 <210> SEQ ID NO: 5
 50 <211> LENGTH: 16
 51 <212> TYPE: DNA

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/028,158

DATE: 05/01/2002

TIME: 12:04:14

Input Set : N:\Crf3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw

52 <213> ORGANISM: Homo sapiens	
53 <400> SEQUENCE: 5	
54 gcgggcctcg ttccag	16
56 <210> SEQ ID NO: 6	
57 <211> LENGTH: 22	
58 <212> TYPE: DNA	
59 <213> ORGANISM: Homo sapiens	
60 <400> SEQUENCE: 6	
61 gccctggaca ccaactattg ct	22
63 <210> SEQ ID NO: 7	
64 <211> LENGTH: 22	
65 <212> TYPE: DNA	
66 <213> ORGANISM: Homo sapiens	
67 <400> SEQUENCE: 7	
68 aggctccaaa tgtaggggca gg	22
70 <210> SEQ ID NO: 8	
71 <211> LENGTH: 20	
72 <212> TYPE: DNA	
73 <213> ORGANISM: Homo sapiens	
74 <400> SEQUENCE: 8	
75 catctgggtcc cggtggcgct	20
77 <210> SEQ ID NO: 9	
78 <211> LENGTH: 18	
79 <212> TYPE: DNA	
80 <213> ORGANISM: Homo sapiens	
81 <400> SEQUENCE: 9	
82 gacgattctg aagtaggg	18
84 <210> SEQ ID NO: 10	
85 <211> LENGTH: 21	
86 <212> TYPE: DNA	
87 <213> ORGANISM: Homo sapiens	
88 <400> SEQUENCE: 10	
89 caaagggctc tggtaggtcct g	21
91 <210> SEQ ID NO: 11	
92 <211> LENGTH: 22	
93 <212> TYPE: DNA	
94 <213> ORGANISM: Homo sapiens	
95 <400> SEQUENCE: 11	
96 cttagaggta attcccttgg gg	22
98 <210> SEQ ID NO: 12	
99 <211> LENGTH: 20	
100 <212> TYPE: DNA	
101 <213> ORGANISM: Homo sapiens	
102 <400> SEQUENCE: 12	
103 cttctacaat gagctgggtg	20
105 <210> SEQ ID NO: 13	
106 <211> LENGTH: 20	
107 <212> TYPE: DNA	
108 <213> ORGANISM: Homo sapiens	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/028,158

DATE: 05/01/2002

TIME: 12:04:14

Input Set : N:\Crf3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw

```

109 <400> SEQUENCE: 13
110      tcatgaggta gtcagtcagg                                20
112 <210> SEQ ID NO: 14
113 <211> LENGTH: 16
114 <212> TYPE: DNA
115 <213> ORGANISM: Homo sapiens
116 <400> SEQUENCE: 14
117      ccccgagggc ggcattg                                16
119 <210> SEQ ID NO: 15
120 <211> LENGTH: 16
121 <212> TYPE: DNA
122 <213> ORGANISM: Homo sapiens
123 <400> SEQUENCE: 15
124      catgccgccc tcggggg                                16
126 <210> SEQ ID NO: 16
127 <211> LENGTH: 16
128 <212> TYPE: DNA
129 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 16
131      cacacagtag tgcattg                                16
133 <210> SEQ ID NO: 17
134 <211> LENGTH: 16
135 <212> TYPE: DNA
136 <213> ORGANISM: Homo sapiens
137 <400> SEQUENCE: 17
138      catgcactac tgtgtg                                16
140 <210> SEQ ID NO: 18
141 <211> LENGTH: 16
142 <212> TYPE: DNA
143 <213> ORGANISM: Homo sapiens
144 <400> SEQUENCE: 18
145      cctttgcaag tgcattc                                16
147 <210> SEQ ID NO: 19
148 <211> LENGTH: 16
149 <212> TYPE: DNA
150 <213> ORGANISM: Homo sapiens
151 <400> SEQUENCE: 19
152      gatgcacttg caaagg                                16
154 <210> SEQ ID NO: 20
155 <211> LENGTH: 2574
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
158 <220> FEATURE:
159 <221> NAME/KEY: CDS
160 <222> LOCATION: (254)..(1492)
161 <400> SEQUENCE: 20
162      cctgtttaga cacatggaca acaatcccag cgctacaagg cacacagtcc gcttcttcgt      60
163      cctcaggggt gccagcgctt cctggaagtc ctgaagctct cgcagtgtag tgagttcatg      120
164      caccttcttg ccaagcctca gtctttggga tctggggagg ccgcctggtt ttctctccctc      180

```

RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/10/028,158

TIME: 12:04:14

Input Set : N:\Crif3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw

165	cttctgcacg tctgctgggg tctcttcctc tccaggcctt gccgtccccc tggcctctct	240
166	tcccagctca cac atg aag atg cac ttg caa agg gct ctg gtg gtc ctg	289
167	Met Lys Met His Leu Gln Arg Ala Leu Val Val Leu	
168	1 5 10	
169	gcc ctg ctg aac ttt gcc acg gtc agc ctc tct ctg tcc act tgc acc	337
170	Ala Leu Leu Asn Phe Ala Thr Val Ser Leu Ser Leu Ser Thr Cys Thr	
171	15 20 25	
172	acc ttg gac ttc ggc cac atc aag aag agg gtg gaa gcc att agg	385
173	Thr Leu Asp Phe Gly His Ile Lys Lys Lys Arg Val Glu Ala Ile Arg	
174	30 35 40	
175	gga cag atc ttg agc aag ctc agg ctc acc agc ccc cct gag cca acg	433
176	Gly Gln Ile Leu Ser Lys Leu Arg Leu Thr Ser Pro Pro Glu Pro Thr	
177	45 50 55 60	
178	gtg atg acc cac gtc ccc tat cag gtc ctg gcc ctt tac aac agc acc	481
179	Val Met Thr His Val Pro Tyr Gln Val Leu Ala Leu Tyr Asn Ser Thr	
180	65 70 75	
181	cgg gag ctg ctg gag gag atg cat ggg gag agg gag gaa ggc tgc acc	529
182	Arg Glu Leu Leu Glu Glu Met His Gly Glu Arg Glu Glu Gly Cys Thr	
183	80 85 90	
184	cag gaa aac acc gag tcg gaa tac tat gcc aaa gaa atc cat aaa ttc	577
185	Gln Glu Asn Thr Glu Ser Glu Tyr Tyr Ala Lys Glu Ile His Lys Phe	
186	95 100 105	
187	gac atg atc cag ggg ctg gcg gag cac aac gaa ctg gct gtc tgc cct	625
188	Asp Met Ile Gln Gly Leu Ala Glu His Asn Glu Leu Ala Val Cys Pro	
189	110 115 120	
190	aaa gga att acc tcc aag gtt ttc cgc ttc aat gtg tcc tca gtg gag	673
191	Lys Gly Ile Thr Ser Lys Val Phe Arg Phe Asn Val Ser Ser Val Glu	
192	125 130 135 140	
193	aaa aat aga acc aac cta ttc cga gca gaa ttc cgg gtc ttg cgg gtg	721
194	Lys Asn Arg Thr Asn Leu Phe Arg Ala Glu Phe Arg Val Leu Arg Val	
195	145 150 155	
196	ccc aac ccc agc tct aag cgg aat gag cag agg atc gag ctc ttc cag	769
197	Pro Asn Pro Ser Ser Lys Arg Asn Glu Gln Arg Ile Glu Leu Phe Gln	
198	160 165 170	
199	atc ctt cgg cca gat gag cac att gcc aaa cag cgc tat atc ggt ggc	817
200	Ile Leu Arg Pro Asp Glu His Ile Ala Lys Gln Arg Tyr Ile Gly Gly	
201	175 180 185	
202	aag aat ctg ccc aca cgg ggc act gcc gag tgg ctg tcc ttt gat gtc	865
203	Lys Asn Leu Pro Thr Arg Gly Thr Ala Glu Trp Leu Ser Phe Asp Val	
204	190 195 200	
205	act gac act gtg cgt gag tgg ctg ttg aga aga gag tcc aac tta ggt	913
206	Thr Asp Thr Val Arg Glu Trp Leu Leu Arg Arg Glu Ser Asn Leu Gly	
207	205 210 215 220	
208	cta gaa atc agc att cac tgt cca tgt cac acc ttt cag ccc aat gga	961
209	Leu Glu Ile Ser Ile His Cys Pro Cys His Thr Phe Gln Pro Asn Gly	
210	225 230 235	
211	gat atc ctg gaa aac att cac gag gtg atg gaa atc aaa ttc aaa ggc	1009
212	Asp Ile Leu Glu Asn Ile His Glu Val Met Glu Ile Lys Phe Lys Gly	
213	240 245 250	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/028,158

DATE: 05/01/2002

TIME: 12:04:14

Input Set : N:\Crif3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw

214	gtg gac aat gag gat gac cat ggc cgt gga gat ctg ggg cgc ctc aag	1057
215	Val Asp Asn Glu Asp Asp His Gly Arg Gly Asp Leu Gly Arg Leu Lys	
216	255 260 265	
217	aag cag aag gat cac cac aac cct cat cta atc ctc atg atg att ccc	1105
218	Lys Gln Lys Asp His His Asn Pro His Leu Ile Leu Met Met Ile Pro	
219	270 275 280	
220	cca cac cgg ctc gac aac ccg ggc cag ggg ggt cag agg aag aag cgg	1153
221	Pro His Arg Leu Asp Asn Pro Gly Gln Gly Gly Gln Arg Lys Lys Arg	
222	285 290 295 300	
223	gct ttg gac acc aat tac tgc ttc cgc aac ttg gag gag aac tgc tgt	1201
224	Ala Leu Asp Thr Asn Tyr Cys Phe Arg Asn Leu Glu Glu Asn Cys Cys	
225	305 310 315	
226	gtg cgc ccc ctc tac att gac ttc cga cag gat ctg ggc tgg aag tgg	1249
227	Val Arg Pro Leu Tyr Ile Asp Phe Arg Gln Asp Leu Gly Trp Lys Trp	
228	320 325 330	
229	gtc cat gaa cct aag ggc tac tat gcc aac ttc tgc tca ggc cct tgc	1297
230	Val His Glu Pro Lys Gly Tyr Tyr Ala Asn Phe Cys Ser Gly Pro Cys	
231	335 340 345	
232	cca tac ctc cgc agt gca gac aca acc cac agc acg gtg ctg gga ctg	1345
233	Pro Tyr Leu Arg Ser Ala Asp Thr Thr His Ser Thr Val Leu Gly Leu	
234	350 355 360	
235	tac aac act ctg aac cct gaa gca tct gcc tcg cct tgc tgc gtg ccc	1393
236	Tyr Asn Thr Leu Asn Pro Glu Ala Ser Ala Ser Pro Cys Cys Val Pro	
237	365 370 375 380	
238	cag gac ctg gag ccc ctg acc atc ctg tac tat gtt ggg agg acc ccc	1441
239	Gln Asp Leu Glu Pro Leu Thr Ile Leu Tyr Val Gly Arg Thr Pro	
240	385 390 395	
241	aaa gtg gag cag ctc tcc aac atg gtg gtg aag tct tgt aaa tgt agc	1489
242	Lys Val Glu Gln Leu Ser Asn Met Val Val Lys Ser Cys Lys Cys Ser	
243	400 405 410	
244	tga gacccacgt gcgacagaga gaggggagag agaaccacca ctgcctgact	1542
245	gcccgtcct cgggaaacac acaagcaaca aacctcactg agaggcctgg agcccacaac	1602
246	cttcggctcc gggcaaattg ctgagatgga ggtttccttt tggaacattt ctttcttget	1662
247	ggctctgaga atcacggtgg taaagaaagt gtgggtttgg ttagaggaag gctgaactct	1722
248	tcagaacaca cagactttct gtgacgcaga cagaggggat ggggatagag gaaagggatg	1782
249	gtaagttag atgttggtg gcaatgggat ttgggctacc cttaaaggag aaggaagggc	1842
250	agagaatggc tgggtcagg ccagactgga agacacttca gatctgaggt tggatttget	1902
251	cattgctgta ccacatctgc tctagggaat ctggattatg ttatacaagg caagcatttt	1962
252	ttttttaaa gacaggttac gaagacaaag tcccagaatt gtatctcata ctgtctggga	2022
253	ttaagggcaa atctattact ttgcaaact gtccctcata tcaattaaca tcgtgggtca	2082
254	ctacaggag aaaatccagg tcatgcagtt cctggcccat caactgtatt gggccttttg	2142
255	gatatgctga acgcagaaga aagggtggaa atcaaccctc tcctgtctgc cctctgggtc	2202
256	cctcctctca cctctccctc gatcatattt ccccttggac acttggttag acgccttcca	2262
257	ggtcaggatg cacatttctg gattgtggtt ccatgcagcc ttggggcatt atgggtcttc	2322
258	ccccacttcc cctccaagac cctgtgttca tttggtgttc ctggaagcag gtgctacaac	2382
259	atgtgaggca ttccgggaag ctgcacatgt gccacacagt gacttgccc cagacgcata	2442
260	gactgaggta taaagacaag tatgaatatt actctcaaaa tctttgtata aataaatatt	2502
261	tttggggcat cctggatgat ttcattcttct ggaatattgt ttctagaaca gtaaaagcct	2562
262	tattctaagg tg	2574

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/028,158

DATE: 05/01/2002

TIME: 12:04:15

Input Set : N:\Crf3\RULE60\10128158.raw

Output Set: N:\CRF3\05012002\J028158.raw